March 15, 2003 1420 East 6th Ave. P.O. Box 200701 Helena, MT 59620-0701

Environmental Quality Council Montana Department of Environmental Quality Montana Department of Fish, Wildlife and Parks

Fisheries Division
Endangered Species Coordinator
Native Species Coordinator, Fisheries
Kalispell Office

Montana State Library, Helena

MT Environmental Information Center

Montana Audubon Council

Green Mountain Conservation District, P.O. Box 1329, Trout Creek, MT 59874

U.S. Army Corp of Engineers, Helena

U.S. Fish and Wildlife Service, Helena

State Historic Preservation Office, Helena

Bull River Watershed Council, 68 East Fork Bull River Road, Noxon, MT 59853

Avista Corporation, P.O. Box 1469, Noxon, MT 59853

Kootenai National Forest, Cabinet Ranger Station, 2693 Highway 200, Trout Creek, MT 59874

Water Consulting, Inc., 576 Spokane Avenue, Whitefish, MT 59937

### Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for the Future Fisheries Improvement Program. The Program tentatively plans to provide funding for a channel restoration project on a degraded reach of the South Fork Bull River. This proposed project is located within the Kootenai National Forest approximately twelve miles north of the community of Noxon in Sanders County.

Please submit any comments that you have by 5:00 P.M., April 16, 2003 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Completion of this project is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432. Please note that this draft EA will be considered as final if no substantive comments are received by the deadline listed above.

Sincerely,

Mark Lere, Program Officer Habitat Protection Bureau Fisheries Division e-mail: mlere@state.mt.us

#### ENVIRONMENTAL ASSESSMENT

# Fisheries Division Montana Fish, Wildlife and Parks South Fork Bull River Channel Restoration Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 which directs the Department to administer a Future Fisheries Improvement Program. The program involves physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. Additionally, the 1999 Montana Legislature amended statute sections 87-1-273, 15-38-202 and Section 5, Chapter 463, Laws of 1995 to create a bull trout and cutthroat trout enhancement program. The program calls for the enhancement of bull trout and cutthroat trout through habitat restoration, natural reproduction and reductions in species competition by way of the Future Fisheries Program.

The Future Fisheries Improvement Program is proposing to provide funding for a project calling for the restoration of a 1,400-foot reach of the South Fork Bull River. The intent of this project is to improve channel stability and enhance habitat conditions for migratory and resident westslope cutthroat trout and bull trout. This reach of river was degraded in the early 1990's as a result of a landslide that impacted the active channel. The project site is located on the Kootenai National Forest approximately twelve miles north of the community of Noxon in Sanders County (Attachment 1).

- I. <u>Location of Project</u>: This project will be conducted on the South Fork Bull River located approximately twelve miles north of the community of Noxon within Township 28 North, Range 33 West, Section 25 in Sanders County. The project site is located within the boundaries of the Kootenai National Forest.
- II. <u>Need for the Project</u>: One goal within Montana Fish, Wildlife and Parks six-year plan of operation for the fisheries program is to "restore and enhance degraded habitat" by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on public and private lands. This proposed project would help achieve this goal.

During the early 1990's, a landslide occurred in the South Fork Bull River drainage causing a short segment of the river to relocate and braid. Although not fully understood, this landslide apparently was caused by a logging road and skid trails concentrating run-off on an unstable slope during a rain on snow event. Sediment accumulations from the slide have decreased the depth of pools and clogged interstitial spaces among streambed gravel. Debris accumulations have impounded large amounts of fine sediment, resulting in extensive channel braiding and very poor fish habitat. Upstream fish passage likely is impeded by channel dewatering, headcutting and debris accumulations. A channel headcut is presently migrating upstream through the affected area as the reach slowly recovers from this disturbance. Restoration of this disturbed reach is expected to eliminate a chronic source of sediment and will re-establish aquatic habitat for bull trout and westslope cutthroat trout.

# III. Scope of the Project:

The project proposes to restore a 1,400-foot reach of the South Fork Bull River that has been altered as a

result of a recent landslide event. Restoration activities call for re-constructing approximately 400 feet of braided stream channel to a Rosgen "B" channel type (Attachment 2). A series of rock cross vanes will be installed for grade control. Root-wad structures will be installed to protect stream banks on outside meander bends and woody debris will be incorporated into the channel to diversify riffle habitat. The rock vanes, root wads and woody debris will create a more diverse aquatic habitat by forming a complex series of pools, glides and riffles with overhead cover. All areas disturbed during construction will be seeded with a mixture of wetland and upland species of grass and sedge. Shrubs will be planted as cuttings, root stock and/or transplants along the margins of the restored stream channel to enhance the riparian corridor. In addition to the reconstruction of 400 feet of new channel, approximately 1,100 feet of the South Fork Bull River located downstream of the debris accumulations will be restored to a proper dimension, pattern and profile. The U.S. Forest Service has completed erosion control work at the toe of the slide using cross logs and re-vegetation to stabilize the area. However, additional material from surface erosion of the slide is not expected to enter the active channel because of a wide vegetated bench located between the slide and the stream. This project is expected to cost \$47,097.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$15,739.00 to complete the project. Water Consulting Inc., a stream restoration company, prepared an assessment and final design report for the project.

# IV. Environmental Impact Checklist:

Please see attached checklist.

# V. <u>Explanation of Impacts to the Physical Environment</u>

1. Terrestrial and aquatic life and habitats.

Restoring the braided stream channel on the South Fork Bull River is expected to create healthier habitat for aquatic life by reducing sediment loading, creating greater environmental complexity and restoring migratory connectivity. Expected improvements in the aquatic habitat should enhance westslope cutthroat trout and bull trout populations in the river.

2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during project construction. To minimize turbidity, construction will occur during a low flow period and operation of equipment in the stream channel will be minimized to the extent practicable. A diversion channel will be constructed to bypass stream flow around the project site to minimize turbidity. The existing channel will be used to divert a majority of the stream flow. Water will be diverted incrementally into the bypass channel using a gravel coffer dam. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota. A 310 permit will be obtained from the local Conservation District. In the long term, restoring the existing channel would reduce sediment contributions to downstream areas, thereby improving the overall quality of downstream waters.

3. Geology and soil quality, stability and moisture.

Soils along the stream margin would be disturbed during construction of the new channel, but

would be stabilized with substantial re-vegetation efforts. Overall, the project is expected to reduce bank erosion and improve channel stability by returning the stream to a two stage channel that is self maintaining and can accommodate floods without major changes in pattern and profile.

# 4. Vegetation cover, quantity and quality.

Riparian vegetation would be disturbed during the period of construction. However, proposed revegetation efforts would result in an overall improvement to the riparian vegetation.

### 5 Aesthetics

During the period of construction, aesthetics would be adversely impacted due to on-site construction activities and the presence of heavy equipment. Construction is expected to occur over a two to three week period. In the long term, aesthetics would be enhanced by restoring a degraded reach of the South Fork Bull River to a healthier and more complex stream environment.

7. Unique, endangered, fragile, or limited environmental resources.

The South Fork Bull River supports fluvial and resident forms of westslope cutthroat trout and bull trout. Westslope cutthroat trout is a species of special concern in Montana and bull trout are listed as threatened under the Endangered Species Act. Proposed improvements made to the South Fork Bull River are expected to benefit both these species of fish. Because the South Fork Bull River supports bull trout, a listed species, this project will be included in Montana Fish, Wildlife and Parks Section 6 conservation plan with the U.S. Fish and Wildlife Service.

# 9. Historic and archaeological sites

The proposed project likely will require an individual Army Corp of Engineers 404 permit. Therefore, the State Historic Preservation Office has been contacted to determine the need for compliance with the federal historic preservation regulations. The project will not begin until a cultural clearance is granted.

# VI. Explanation of Impacts on the Human Environment.

# 7. Access to & quality of recreational activities.

This project intends to improve the diversity of fish habitat and riparian condition within an altered reach of the South Fork Bull River, an important spawning and rearing tributary for salmonids in the upper Bull River drainage. As a result, the recreational fisheries with the Bull River drainage are expected to improve.

# 13. Locally adopted environmental plans & goals.

This proposed project is strongly supported by the Bull River Watershed Council. The Council considers this channel restoration work has a high priority within their drainage.

# VII. Discussion and Evaluation of Reasonable Alternatives.

## 1. No Action Alternative

If no action is taken, this reach of the South Fork Bull River will remain degraded, fish habitat will be poor and fish passage will be hindered due to sediment and debris accumulations, channel dewatering, and head cutting. Recreational opportunities associated with fish and wildlife resources will remain reduced and aesthetics will continue to be impaired.

# 2. <u>The Proposed Alternative</u>

The proposed alternative is designed to restore approximately 1,400 feet of degraded channel on the South Fork Bull River. This restoration work would remove a chronic source of sediment, provide for more diverse aquatic habitat and restore migratory connectivity for bull trout and westslope cutthroat trout. This alternative would improve fish and wildlife habitat, aesthetics and water quality within the project area and would be expected to increase salmonid populations in the Bull River drainage.

# VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and will be contingent upon their approval. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA will be published on Montana Fish, Wildlife and Park's web page: <a href="mailto:fwp.state.mt.us">fwp.state.mt.us</a>.

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on April 16, 2003.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer Habitat Protection Bureau Fisheries Division Montana Department of Fish, Wildlife and Parks 1420 East 6th Avenue Helena, MT 59620

Telephone: (406) 444-2432 e-mail: <u>mlere@state.mt.us</u>

## MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701 (406) 444-2535

### ENVIRONMENTAL ASSESSMENT

Project Title South Fork Bull River Channel Restoration Project

Division/Bureau Fisheries Division -Future Fisheries Improvement
Description of Project The Future Fisheries Improvement Program is
proposing to provide funding for a project calling for the restoration
of an altered, 1,400-foot reach of the South Fork Bull River. This
reach of river was degraded in the early 1990'a as a result of a
landslide that impacted the active channel. The intent of this project
is to improve channel stability and enhance habitat conditions for
migratory and resident westslope cutthroat trout and bull trout. The
project site is located on the Kootenai National Forest approximately
twelve miles north of the community of Noxon in Sanders County.

#### POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats			Х			Х
2. Water quality, quantity & distribution			Х			Х
3. Geology & soil quality, stability & moisture			Х			Х
4. Vegetation cover, quantity & quality			Х			Х
5. Aesthetics			Х			Х
6. Air quality				Х		
7. Unique, endangered, fragile, or limited environmental resources			X			х
8. Demands on environmental resources of land, water, air & energy				Х		
9. Historical & archaeological sites				Х		Х

## POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				Х		
2. Cultural uniqueness & diversity				Х		
3. Local & state tax base & tax revenue				Х		
4. Agricultural or industrial production				Х		
5. Human health				Х		
6. Quantity & distribution of community & personal income				Х		
7. Access to & quality of recreational and wilderness activities			X			х
8. Quantity & distribution of employment				Х		
9. Distribution & density of population & housing				Х		
10. Demands for government services				Х		
11. Industrial & commercial activity				Х		
12. Demands for energy				Х		
13. Locally adopted environmental plans & goals				Х		Х
14. Transportation networks & traffic flows				Х		

Other groups or agencies contacted or which may have overlapping jurisdiction Green Mountain Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office
Individuals or groups contributing to this EA Bull River Watershed

Council, Water Consulting, Inc.

Recommendation concerning preparation of EIS No EIS required.

EA prepared by: Mark Lere

Date: March 5, 2003